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## INFERENTIALITY IN KALASHA AND KHOWAR<sup>1</sup>

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In this paper I present data on the coding of inferentiality/evidentiality distinctions in the far Northwestern Indo-Aryan (Dardic) languages Kalasha and Khowar, pointing out the remarkable similarity of semantic developments in these languages to those described for the Turkish particle *miş* (Slobin and Aksu 1982) and Lhasa Tibetan (DeLancey 1985-a, b 1986). I then suggest that these data support an explanation of these developments in terms of the model developed by DeLancey relating both volitionality and inferentiality distinctions to the conceptualization of events as causal chains.

Describing Lhasa Tibetan (1985-a:58-9), DeLancey notes that tense/aspect and evidentiality are coded by a system of copular auxiliaries which are specified for evidentiality. The direct knowledge members of the pairs, *vin* and *yod*, represent the speaker's direct knowledge or knowledge "which is well-integrated into his conceptual framework," while the inferential members *red* and *'dug* indicate "inference or new information which has yet to be integrated into the speaker's conceptual framework." (p. 59)

Characterizing the semantic commonality of the various uses of the Turkish evidential particle *miş*, Slobin and Aksu (1984:195-6) find that "the essence of all uses of *miş* is to encode situations for which the speaker is not somehow prepared--situations on the fringe of consciousness, learned of indirectly, or not immediately assimilable to the mental sets of the moment. . . . It is as if the speaker were saying: 'I have just become aware of something for

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<sup>1</sup> The Kalasha and Khowar data in this paper were gathered during fieldwork in Pakistan during the period October 1986 - November 1987. This research was supported by a grant from the American Institute of Pakistan Studies, which is gratefully acknowledged. For a fuller description of the Kalasha and Khowar verb systems, see Bashir (1988).

In the transcription system employed in this paper, capitalization of consonants denotes the retracted member of a dental/retracted pair. The exception to this statement is the use of <G> for the voiced velar fricative in Khowar. In Kalasha words <l> represents a strongly velarized 'l' and <ly> a palatalized 'l'. In Khowar examples, <l> represents palatalized 'l', while <L> represents a velarized 'l'. Capitalization of vowels (needed for Kalasha) denotes contrastive retroflexion (or rhotacization) of vowels.



which I had no premonitory consciousness'."

### 1. Kalasha

Kalasha has nine basic finite tense-aspect forms, exemplified here with the first person singular of the verb kárik 'to do'.

#### Non-past

PRESENT/FUTURE-NON SPECIFIC (Henceforth P/F-NS)

a kár-im 'I do, I will do'

PRESENT/FUTURE-SPECIFIC (P/F-S)

a kár-im dai 'I am doing, will do (at a specific time)'

PRESENT PERFECT (P PERF)

a kai á-am 'I have done'

#### Past

PAST-ACTUAL (PST-A)

a ár-is 'I did'

PAST-INFERENTIAL (PST-I)

a káda him 'I did (reportedly, inadvertently)'

PAST IMPERFECTIVE-ACTUAL  
(PST IMPFV-A)

a kar-íman áy-is  
'I was doing'

PAST IMPERFECTIVE-  
INFERENTIAL (PST IMPFV-I)

a kar-íman ásta him  
'I was doing (reportedly)'

PAST PERFECT-ACTUAL  
(PST PERF-A)

a kai áy-is  
'I did, had done'

PAST PERFECT-INFERENTIAL  
(PST PERF-I)

a kai ás-ta him 'I had done, did  
(reportedly)'

The past tense verb forms are obligatorily coded for the distinction between what I shall call "actual" and "inferential" meaning.<sup>2</sup> The PST-A consists of verb stem plus preterital person/number suffixes.<sup>3</sup> The PST-I consists of the past participle plus person/number marking for 1st and 2nd persons supplied by appending the finite PST-I forms of hik 'to become'. 3rd person sg. and pl. have no overt specification of person and

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<sup>2</sup> "Actual" subsumes such specific meanings as personally witnessed, having long standing in one's conceptual repertoire, etc., while "inferential" is a cover term for such more specific meanings as Slobin and Aksu's "unprepared mind", DeLancey's "new information", "hearsay," "admirative", "inferred", etc.

<sup>3</sup> Past stems in Kalasha (and in Khowar) are either identical with the present stem or preserve OIA a-augments.

number. Participial tenses are constructed with the imperfective<sup>4</sup> or perfective participle plus a finite form of 'be' as auxiliary. The inferentiality distinction is effected by selecting either the actual or the inferential past tense form of 'be'.<sup>5</sup> I give here examples illustrating the morphologically expressed actual-inferential contrast for past-tense forms.

1-a) PST-A

áma krom mai baaya ár-au  
 this(ACC) work(NOM) my brother(NOM) do(PST-A)-3s  
 'My brother did this work (I saw him do it).'

b) PST-I

a ayá a āgár Zot káda  
 I here come(PST-A)-1s fire already do(PST-I)-3  
 'I came here, (and someone) already (had) made  
 the fire (in my absence so I didn't see it being done).'

2-a) PST IMPFV-A

japaní bo DAú Žu-íman áy-is  
 japanese much beans eat(PST IMPFV-A)-3s  
 'The Japanese man used to eat a lot of beans.'

b) PST IMPFV-I

šató ek gagí-ik dúi tan hátya za kai  
 that one cow(DIM) milk(CP) self for food do(CP)  
 Žu-íman ásta  
 eat(PST IMPFV-I)-3s  
 'He used to milk that little cow and make some food for  
 himself and eat.'

<sup>4</sup> The imperfective participle consists of verb root plus -íman and the perfective participle of verb root plus -i. There are a few irregular perfective participial forms, but all imperfective participles are regularly formed.

<sup>5</sup> 'Be' has two forms ásik (animate) and šik (inanimate). Animate and inanimate forms are available in the 3rd person in both past and present tenses. The relevant paradigms are:

## 'be' (PST-A)

	Sg.	Pl.
1.	áy-is	áy-imi
2.	áy-i	áy-ili
3. (an.)	áy-is	áy-ini
(inan.)	aš-ís	aš-íni

## 'be' (PST-I)

1.	ásta him	ásta hik
2.	ásta his	ásta hali
3. (an.)	ásta	ásta
(inan.)	ši-ála	ši-ála



In (2-a) the speaker is reporting a fact that he knows from direct personal experience, while (2-b) is part of a traditional story, the events of which are imaginary.

3-a) PST PERF-A

Zošī banda-ik-a krAkÁ pai áy-is  
 Zhoshi instruct-INF-PURP K. go(PST PERF-A)-3s  
 'He went go Karakal to call them to participate in the Zhoshi festival.'

b) PST PERF-I

phāD čhīni mizók guum žúla  
 storage bin break(CP) mouse wheat eat(PST-I)-3s  
 a jag-és guum žúi aš-ís  
 I look(PST-A)-1s wheat eat(PST PERF-A)-3s  
 mizók Zot guum žúi ásta  
 mouse already wheat eat(PST PERF-I)3s

'A mouse/mice broke the storage bin and ate the wheat. (When) I looked, the wheat was eaten. A mouse had already eaten the wheat.'

In (3-a) the speaker is reporting an action that he knows about directly, while in (3-b) he infers that a mouse ate the wheat when he sees that some of the wheat in the bin has been eaten.

The inferential forms have a variety of specific functions, all of which are derivable from the basic semantic distinction between the inferential and the actual forms--that of action witnessed vs. action not witnessed by the speaker. In the past tenses, this, and not time depth, is the critical semantic parameter. Thus the PST-I forms can be used for reporting actions taking place in both the recent and the distant past, provided that the speaker learned about them other than by direct observation. Example (4) illustrates its use to report an action in the recent past.

4) aú dúi gála atrá  
 bread burn(CP) go(PST-I)-3s there  
 'The bread burned there.'

This sentence signals that the speaker did not see the bread burn; the context is that she had asked her daughter to keep an eye on the bread cooking. When the mother returned to find the bread burned she said, in annoyance, the sentence given as (4).

Inferential forms occur when we have a speaker observing a state resulting from an event which took place in his absence, as in (5):

5) páyp-una uk CuCú húla  
 pipe-LOC water dry become(PST-I)-3s  
 '(I see that) the water has dried up in the pipe.'

This sentence was uttered when the speaker walked up to the water pipe expecting to get some water and saw that there was none in it.



PST-I forms often carry the main burden of narration in storytelling, whether about the real world to relate actions unseen by the speaker, or about the imaginary world. Example (8) is from a narrative dealing with the real world, and (7) from a story about the realm of legend and myth.

- 6) tará pará-e té-o pai tará ne nílá  
there go(PST-A)-when they-o goats theré not take(PST-I)-3s  
'When I went there, (I found that) they hadn't taken the goats there.'

- 7) ek kursí-una Sa nis-úna  
one chair-LOC king sit(PST-I)-3s  
'The king sat down on one chair.'

In the non-past tenses, the basic verb forms are semantically but not morphologically coded for ACTUAL meanings (since morphological counterparts with INFERENTIAL meaning are not available), but corresponding inferential forms are constructed by employing two semi-analytic mechanisms. In the first of these, the form húla, which is the inferential past 3rd person form of hik 'to become', is appended to the finite verb in non-past tenses to yield a form with inferential semantics. Example (8-b) illustrates the construction with húla.

8-a) P/F-NS (actual semantics)

se pešáur jély-una á-au  
he P. jail-LOC be(ANIM)(P/F)-3s  
'He is in jail in Peshawar (I knew it already).'

b) P/F-NS (inferential semantics)

se pešáur jély-una á-au húla  
he P. jail-LOC be(P/F)-3s become(PST-I)-3s  
'He is in jail in Peshawar (and I just found out about it).'

Functioning in normal discourse and conversation, or in narration of directly experienced events, the general meaning generated by the inferential construction with húla is that the speaker has just found out about (i.e. was not aware of before) the content of the assertion. Specific nuances can range among simply new information (9), inference (10), mild surprise (11), regret (12), annoyance (13), and even compliments (14). These meanings are almost identical to the various senses identified by Slobin and Aksu (1984) for the Turkish evidential particle -miş-, who find that -miş- conveys inference, i.e. information concluded on the basis of indirect evidence, hearsay, surprise, irony, and compliments.

I give here examples of each of these shades of meaning in constructions with húla.

9) new information

ameriká bo hūtala dur kai ší-an húla  
America very high house make(P PERF)-3p become(PST-I)3  
'In America there are (built) very tall houses (i.e. buildings).'



A sentence like (9) would be uttered, for example, by a villager who has just returned home after visiting the outside world and is relating to his friends and family the new things he has learned.

10) inference

se ne i-ú                      húla  
he not come(P/F-NS)-3s become(PST-I)-3s  
(It seems that) 'He won't come.'

Sentence (10) could be uttered in a situation when the speaker concludes (infers) on the basis of some indirect evidence--a letter, for example, or information that the subject is occupied with other work and is very busy--that the subject of discussion won't be able to come.

11) surprise

mó-ta              ragéSTi nis-dai              húla  
no(IMP)-TOP early      take(P/F-S)-2s become(PST-I)3s  
'You don't say! You are taking them out (too) early.' (Trail, unpublished text)

The context for (11) is that two shepherds are discussing when they are going to take their goats to the high pastures for the summer season. Upon hearing that the first speaker is about to take his goats up, the second speaker utters (11).

12) regret

a              galyatí kai á-am              húla  
I(NOM) mistake do(PRES PERF)-1s become(PST-I)-3s  
'I have made a mistake (and just realized it).'

13) annoyance

a) ko DúD-iu              húla  
why sleep(P/F-NS)-3s become (PST-I)-3s  
'Why is he sleeping?'

b) tai              bo              tása              paysá di-élyi              húla  
you(OBL) much he(OBL) money      give(NEC) become(PST-I)-3s  
mai              bo              afsús  
I(OBL) very sorry  
'You have to give him a lot of money. I am sorry (to learn of it).'

14) compliment

ájab              krom káda-his  
remarkable work do(PST-I)-2s  
'You have done a remarkable job!' (Trail, unpublished text)

In (13-a) the sense is conveyed that it is an inappropriate time for sleeping, that the person mentioned shouldn't be sleeping, and in (13-b) the annoyance is overtly expressed. In (14) the speaker expresses his surprise and approval at seeing (for the first time) what his friend has done.



The second mechanism involves the 3rd person pl. P/F-NS form of *ghōik* 'to say' in construction with the infinitive of the main verb. This yields an expression with specifically "hearsay" semantics, glossable as something like 'I hear that [S]' or 'It is said that [S]'. With this construction (a) there is no agent of 'saying' in the conceptual framework, and (b) the speaker does not commit himself to the accuracy of the assertion. This construction is illustrated in (15).

- 15-a) *se pešáur jély-una áyik ghō'-an*  
 he Peshawar jail-LOC be(ANIM)-INF say(P/F-NS)-3p  
 '(I hear that/it is said that) he is in jail in Peshawar.'
- b) *ne šik ghō'-an mai putr*  
 not be(INAN)-INF say(P/F-NS)-3p my son  
 '(I hear that/it is said that) there isn't/aren't any, my son.'

There is yet a third place where the semantics of inferentiality-evidentiality finds expression. Kalasha has an incipient system of compound verbs consisting of the perfective participle plus a finite form of the "vectors" 'go' and 'put'. In Kalasha, compound verbs with 'go' are associated with the semantics of the "prepared mind". For example, sentences such as (16).

- 16) *tu išlyégi par-is atrá*  
 you slip(PFV PPL) go(P/F-NS)-2s there  
 'You will slip there.'

occur as warnings, which are utterances referring to some undesirable situation of which one has specifically premonitory awareness. In (16), the speaker says this because he knows that the place where the addressee is walking is icy and slippery, and is likely to cause a fall.<sup>8</sup>

Compound verbs in 'put', on the other hand, are associated with the "unprepared mind". For example, one might utter (17).

- 17) *a dalabása hísti ath-és*  
 I(NOM) sweepings throw(PFV PPL) put(PST-A)-1s  
 'I threw out the sweepings/trash.'

if he had realized after throwing out the trash, that there was something he needed in it. The sense conveyed is that the action was done mistakenly, that it had unforeseen negative consequences

<sup>8</sup> Khowar has a similar compound verb formation in 'go' with much the same semantics. In Tibetan also (DeLancey 1985:210) the auxiliary *son* (< 'go') is associated with the non-inferential (i.e. first-hand knowledge) semantics in the perfect. In Bashir (1988) I argue that compound verbs in *jānā* 'go' in Hindi, too, are associated with the semantics of the prepared mind.



which the speaker only realized in hindsight.<sup>7</sup>

Inferentiality and volitionality. DeLancey (1985-a:59) notes that in Lhasa Tibetan "with first-person (and with second person subjects in yes/no questions) the choice of auxiliary reflects volitionality; -gyi-'dug and -gi-red (the new/indirect knowledge forms e.b.) occur with non-volitional actors, and -gyi-vod and -gi-yin (the old/direct knowledge forms e.b.) with volitional actors."

In Kalasha also, with first person agents, the inferential form gives a sense of unconscious or inadvertent action. Consider the examples in (18-a,b,c), all of which are actual utterances recorded in context.

- 18-a) *atrá thai á-am                      ħgá ne thi*  
       there put(PRES PERF)-1s aware not become(CP)  
       *pható gála him*  
       then go(PST-I)-1s  
       'I put it there. Then without remembering (it), I left.'
- b) a            *ħgá ne hula him*  
       I(NOM) aware not become(PST-I)-1s  
       'I didn't remember (to get up and make your breakfast, although I had intended to).'
- c) *tai            Tayp                      atrá ásta tháy-o      DúD-ila him*  
       you(OBL) tape recorder there also put(CP)-o sleep(PST-I)-1s  
       'I must have put your tape recorder there and gone to sleep (without realizing it).'

In (18-c) the speaker, having gone to sleep inadvertently, experienced surprise when he realized upon awakening where he had put the tape recorder. Aksu-Koc and Slobin (1982:192) have an almost identical example with the verb 'sleep', which the speaker says upon awakening over his books. I reproduce it here as (19).

- 19) *uyu-muṣ-um    [=Aksu and Slobin's 13]*  
       sleep-m1ṣ-1sg  
       'I must have fallen asleep.'

## 2. Khowar

In Khowar both actual and inferential forms are available in all tenses. The inferential forms are constructed (with the exception of one past imperfective form) with the past inferential form of *bik* 'to become'. The actual-inferential contrast in the future is illustrated in (20).

### Actual

- 20-a) *hasé peṣaur-o-t                      no    bir*

<sup>7</sup> Similarly in Khowar, there is a compound verb formation in 'leave, let go' which has the same semantics.



he Peshawar-OBL-DAT not go(P/F-A)-3s  
 'He will not go to Peshawar.'

### Inferential

b) pešáur-o-te no boGák bir-ái<sup>8</sup>  
 Peshawar-OBL-DAT not go(P/F-I)-3s  
 '(Reportedly/I just learned that) he is not going to Peshawar.'

c) jam korák birét-am  
 good do(P/F-I)-1s  
 '(It turns out/I just found out) that I am doing (it) well.'

In (20-a) the speaker is reporting information that he has known for some time, while in (20-b) the inferential form conveys that he has just found out that the subject is not going to Peshawar. Similarly, in (20-c) the speaker hadn't realized that he was doing well until informed by some outside source. In (21) we see the contrast in the simple past tense.

21-a) Actual  
 awa khilkí-o xuríst-am  
 I window-OBL open(PST-A)-1s  
 'I opened the window.'

b) ohó tonjéiru birét-am  
 oh ruin(PST-I)-1s  
 'Oh, I have ruined (it) (unintentionally, and I just realized this after observing the bad results.)'

In (21-b) the inferential marking conveyed by birétam indicates that the speaker (i) did the action (i.e. caused the result) inadvertently and (ii) has just become aware of (the nature/ effect of) his action. Thus we see that in Khowar the inferential form with 1st person subject also conveys a sense of inadvertency or non-volitionality. Also, the sense that an action was mistaken or wrong often develops in this context. Sentence (22) gives another example of this type of meaning.

22) awa plakh-o nuróGi Cakeáwa birét-am  
 I(NOM) spark plug-OBL upside down put in(PST IMPFV-I<sub>2</sub>)-1s  
 jam bélut misrí paidá hoi  
 fortunately mechanic appear(PST-A)-3s  
 'I was about to put the spark plug in upside down, when fortunately a mechanic appeared.'

In (23) we see the contrast between the actual and the inferential imperfective past forms.

23-a) hasé gyáwa awá niveš-áu ošót-am

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<sup>8</sup> The inferential counterpart of the present/future-actual is constructed with the agent noun (in -ák) plus the PST-I of 'become'.



he come(PPL) I write(PST IMPFV-A)-1s  
 'When he came I was writing.'

- b) hasé gyáwa awá niveš-áu asit-ám  
 he come(PPL) I write(PST IMPFV-I<sub>1</sub>)-1s  
 'When he came I was writing.'

The difference between the actual and inferential versions of (23) is that in (a) the speaker<sub>1</sub> was himself aware that the visitor<sub>3</sub> had come at the time when he<sub>1</sub> was writing; in (b) the fact that a visitor arrived when the speaker<sub>1</sub> was writing was reported to the speaker by someone else (either the visitor<sub>3</sub> or a third party<sub>K</sub>).

The actual/inferential opposition also functions in less obvious ways. Consider examples (24-a and b), expressing contrafactual conditionals--the former employing the subjunctive, and the latter the PAST IMPFV-I<sub>1</sub> form.

- 24-a) ta ban no dirúa sabaq-o-te no boGésu  
 you(OBL) punishment not give(CTF) lesson-OBL-DAT not  
 go(SUBJ)-2s  
 'If you had not been punished you would not have gone to school.'

- b) ta ban no dirúa sabaq-o-te  
 you(OBL) punishment not give(CTF) lesson-OBL-DAT  
 no boG-áu asit-áu  
 not go(PST IMPFV-I)-2s  
 'If you had not been punished you would not have gone to school.'

The difference between (24-a) and (24-b) is that in the former, with the subjunctive form in the then-clause, the speaker knew that this would be the consequence at the time of administering the punishment, while in (b), with the inferential form in the then-clause, he only realized that this consequence resulted from his action afterwards - on the basis of some information acquired after administering the punishment. (25-a and b) show another example of the same semantic distinction.

- 25-a) ispá torén no girúa duáxt-o hurík-o  
 we from above not come(CTF) door-OBL open(INF)-OBL  
 no bes-ám  
 not be able(SUBJ)-1s  
 'If we hadn't come from above (as opposed to from below), I wouldn't have been able to open the door.'

- b) ispá torén no girúa duáxt-o hurík-o  
 we from above not come(CTF) door-OBL open(INF)-OBL  
 no bau asitám  
 not be able(PST IMPFV<sub>2</sub>)-1s  
 'If we hadn't come from above, I wouldn't have been able to open the door.'

In (25-a) the speaker knew at the time of making the decision to



come from above the house, that if we came from below we would not be able to open the gate, while in (25-b) he only discovered this after we in fact came from above and saw the situation of the locks and the door.

The distinction in (24) and (25) is almost identical with that described by DeLancey for two of his Tibetan examples, which are reproduced here as (26).

26-a) qa ril-soq-qa [DeLancey 1985-b:64]

I fall-PERF

'I did fall (just as I expected).'

b) qa ril-byuq

I fall-PERF

'I fell down'

In (26-a), in DeLancey's words, the speaker "understands the cause of the event before it takes place, while the speaker of (26-b) does not." The general point is that the evidential (cf. "actual", "prepared mind") form is used when the speaker is aware of the entire cause-effect chain from start to finish.

The minimal pairs in (24) and (25), which by embedding the verb forms in a counterfactual conditional context separate and overtly express both the cause and the effect ends of the cause-effect chain, provide examples clearly supporting DeLancey's claim that "the semantic distinction between inferential (i.e. marking a statement as based on indirect evidence) and evidential (i.e. based on direct evidence) perfects should be interpreted as reflecting whether or not the speaker has direct knowledge of the Cause end of the Cause-Effect schema which constitutes an event, or only of the Effect end (i.e. the evidence on the basis of which the event is inferred)." (1985:63)

Viewed in this context, the Kalasha and Khowar evidence also supports DeLancey's analysis of the relationship between evidentiality and volitionality. The explanation for the fact that a single formal contrast functions both in the system that encodes epistemological distinctions and in the system that encodes categories pertaining to the action-event "in the world" lies in a parallelism between these two systems, such that the cause of an utterance (speaker's knowledge status) is treated as analogous to the cause of an act (actor's volitionality status).

#### ABBREVIATIONS

A	-	actual	IMPFV	-	imperfective
ABL	-	ablative	INF	-	infinitive
ACC	-	accusative	OBL	-	oblique
ANIM	-	animate	PAST	-	past
CP	-	conjunctive	P	-	present
		participle	P/F	-	present/future
CTF	-	contrafactual	PERF	-	perfect
DAT	-	dative	PFV	-	perfective



I - inferential      PURP - purpose  
IMP - imperative      TOP - topic marker

## REFERENCES

- Aksu-koç, Ayhana A. and Slobin, Dan I. 1986. "A Psychological Account of the Development and use of Evidentials in Turkish". in Chafe and Nichols (eds.) 1986.
- Bashir, Elena. 1988. Some Aspects of Kalasha Syntax: in an Areal and Typological Perspective. Ph.D. Dissertation. University of Michigan-Ann Arbor. Ann Arbor: University Microfilms.
- Chafe, Wallace and Nichols, Johanna (eds.). 1986. Evidentiality: The Linguistic Coding of Epistemology. Norwood, New Jersey: Ablex.
- DeLancey, Scott. 1981. "An Interpretation of Split Ergativity and Related Patterns". Language 57.4:626-657.
- \_\_\_\_\_. 1984. "Notes on Agentivity and Causation". Studies in Language. 8.2:181-213.
- \_\_\_\_\_. 1985-a. "Lhasa Tibetan Evidentials and the Semantics of Causation". BLS 11:65-72.
- \_\_\_\_\_. 1985-b. "Categories of non-Volitional Actor in Lhasa Tibetan". in Zide, Schiller, and Magier, 1985.
- \_\_\_\_\_. 1986. "Evidentiality and Volitionality in Tibetan". in Wallace Chafe and Johanna Nichols (eds.) 1986.
- Slobin, Dan I. and Aynana Aksu. 1982. "Tense, Aspect, and Modality in the Use of the Turkish Evidential". in Tense-Aspect: Between Semantics & Pragmatics, ed. Paul J. Hopper. Amsterdam: Benjamins.
- Zide, Arlene R. K., Eric Schiller, and David Magier. 1985. (eds.) Proceedings of the Conference on Participant Roles: South Asia and Adjacent Areas. Bloomington: Indiana University Linguistics Club.